Executive Summary Table. Preliminary results describing the survival of radio-tagged yearling Chinook salmon and steelhead trout through an MGR turbine unit and the Ice and trash sluiceway at Bonneville Dam's first powerhouse generated (paired release recapture models) and through the spillway, all routes through Powerhouse 1, and through the Powerhouse 2 corner collector, juvenile bypass, and turbine units (route specific survival model). Estimates generated using the paired release recapture models used fish released directly into the route and releases in the immediate tailrace area and for the route specific survival models used fish released at The Dalles Dam and in the Bonneville Dam tailrace. Results are preliminary and may need to be adjusted pending the results of our evaluation of the expected tag life for these evaluations.

|   | Paired Release-Recapture Model |         |         |                 |  |
|---|--------------------------------|---------|---------|-----------------|--|
|   | Yearling Chinook salmon        |         | Steel   | Steelhead trout |  |
| Route   | S                              | 95%CI   | S       | 95%CI           |  |
| MGR Turbine                                     | 0.956                          | ± 0.032 | 0.952   | ± 0.047         |  |
| Powerhouse 1 Unit 4B A, C                       |                                | ノバゲ     | T, L, T |                 |  |
| Powerhouse 1 Ice & Trash sluiceway <sup>C</sup> | 1.00                           | ± 0.044 | 0.985   | ± 0.062         |  |

|   | Route Specific Survival Model   |                                 |  |  |
|---|---------------------------------|---------------------------------|--|--|
|   | Yearling Chinook salmon         | Steelhead trout                 |  |  |
| Site  | S 95%CI                         | S95%CI                          |  |  |
| Spillway <sup>C</sup>                         | 0.910 0.888, 0.931 <sup>B</sup> | 0.979 0.956, 1.002 <sup>C</sup> |  |  |
| Powerhouse 1 <sup>C</sup>                     | 0.913 0.873, 0.949 <sup>B</sup> | 0.965 0.926, 0.999 <sup>B</sup> |  |  |
| Powerhouse 2 turbines (unguided) <sup>C</sup> | 0.951 0.929, 0.972 <sup>B</sup> | 0.889 0.848, 0.927 <sup>B</sup> |  |  |
| Powerhouse 2<br>Juvenile Bypass <sup>C</sup>  | 0.970 0.943, 0.995 <sup>B</sup> | 0.951 0.907, 0.989 <sup>B</sup> |  |  |
| Powerhouse 2<br>Corner Collector, C           | 1.016 0.999, 1.032 <sup>B</sup> | 1.030 1.014, 1.047 <sup>B</sup> |  |  |

A- Control below front roll of B1 powerhouse

<sup>&</sup>lt;sup>B</sup>- Profile likelihood 95% confidence interval

<sup>&</sup>lt;sup>C</sup>- Operation of Powerhouse 1 was intermittent throughout the study period.